

**Communicable Disease Epidemiology  
and Immunization Section**

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**Health Advisory: Suspected Ricin Intoxication in a Child, 6 November 2009**

**Action requested:** Report cases of suspected ricin intoxication to Public Health at 206-296-4774

**Background:** Public Health is investigating a case of suspected ricin intoxication in a child that used Halloween face paint and lipstick that contains castor bean oil.

Case history: A 5 year-old female presented to a King County hospital on Monday Nov. 2nd with a history of abdominal pain and vomiting. On Saturday Oct. 31<sup>st</sup> and Sunday Nov. 1<sup>st</sup>, the patient had heavily applied make-up and lipstick from a Halloween face-painting kit to her face and lips. The make-up was on her face all day and she was licking it off of her lips. On Sunday evening the patient developed significant abdominal pain and began vomiting on Monday. She presented to the hospital and had an acute severe decompensation with refractory hypotension, hypoglycemia with blood glucose in the 40's, altered mental status and poor perfusion. She was resuscitated with IV fluid and a dopamine infusion and admitted to the ICU. The patient recovered over the next 12 hours. She had no fever, diarrhea, or ill contacts. Testing for viral and bacterial etiologies was negative.

**Ricin Facts**

**Incubation period:** Approximately 4-12 hours following inhalation or ingestion of ricin. Symptom onset is unlikely more than 10 hours after ricin ingestion and more than 24 hours after inhalation exposure.

**Symptoms:** Systemic effects depend upon route of exposure and exposure dosage. Dermal and ocular exposure by ricin in powder or mist form can cause erythema and pain of the skin and eyes.

**Ingestion exposure:** Mild poisoning can result in nausea, vomiting, diarrhea, and/or abdominal pain. More severe cases may include profuse vomiting, profuse diarrhea (bloody or nonbloody); severe dehydration; weakness; influenza-like symptoms (fever, myalgia, arthralgia); hallucinations; seizures; hematuria; hypotension; hypovolemic shock; multiple system organ failure.

**Inhalational exposure** may include some or all of the following symptoms: Cough, respiratory distress, bronchoconstriction; pulmonary edema, cyanosis, nausea, excessive diaphoresis, weakness, influenza-like symptoms (fever, myalgia, arthralgia) hypotension, respiratory failure; multisystem organ failure.

**Laboratory findings** are nonspecific and include: metabolic acidosis, increased liver function tests; increased renal function tests; hematuria; leukocytosis. Public Health can facilitate testing at CDC for urinary ricinine, an alkaloid in the castor bean plant in selected cases.

**Treatment:** Largely supportive, contact WA Poison Center at 1-800-222-1222

**Additional clinical information about ricin from the Centers for Disease Control and Prevention is available at:** [www.bt.cdc.gov/agent/ricin/clinicians/index.asp](http://www.bt.cdc.gov/agent/ricin/clinicians/index.asp)

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